

TRUST POLICY FOR THE USE OF RESTRICTED ANTIMICROBIALS

Reference Number	Version 2		Status Final	Author: Kayleigh Lehal Job Title: Lead Antimicrobial Pharmacist
Version / Amendment History	Version	Date	Author	Reason
	1	September 2015	J.Lacey Dr Gnanarajah	Change from guideline to Policy
	2	January 2024	Kayleigh Lehal	<p>Addition of Appendix 1 - microbiology contact information</p> <p>Update to information included in SBAR form</p> <p>Addition of the following antibiotics to the restricted list; Cefiderocol, Ciprofloxacin, Colistin, Levofloxacin</p> <p>Amendment of consultant microbiologist responsibilities and contact hours</p> <p>Updated references to pharmacy out of hours service and acquisition of stock from emergency cupboards</p> <p>Inclusion of referral process on Meditech / ExtraMed</p>
Intended Recipients:				
Divisional and Business Unit leads, all medical and clinical staff, ACPs, clinical pharmacists, Heads of Pharmacy.				
Training and Dissemination:				
Dissemination via the Trust Intranet, via Trust induction for medical staff, mandatory infection control training, prescribing newsletter, face to face teaching with junior Drs.				
To be read in conjunction with:				
Antimicrobial Stewardship Policy				

In consultation with and Date: Antimicrobial Stewardship Group / February 2024					
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Contact for Review	Kayleigh Lehal - Lead Antimicrobial Pharmacist				
Executive Lead Signature	 Dr Gis Robinson, Interim Executive Medical Director				

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1. Introduction

Some antimicrobials are restricted to keep them in reserve to treat serious infections due to organisms resistant to other antimicrobials, or because they have a high risk of causing *C. difficile*, or because there are more cost effective or less toxic alternatives available. Restricting certain antimicrobials in this way is an essential component of an antimicrobial stewardship program, to conserve future effectiveness of antimicrobials, to reduce the risk of healthcare associated infections and ensure patient safety.

Restricted antimicrobials that are being used **outside of a Trust approved guideline** will require the prescriber to obtain approval from a consultant microbiologist before a supply will be made from pharmacy. If the antimicrobial is being used in accordance with a Trust approved guideline then approval is **not** required, but the prescriber should ensure that the indication is clearly documented on the prescription and in the medical case notes. See Appendix 3 for a list of restricted antimicrobials.

Whilst it is important that restrictions are adhered to, it should be noted that if the agents involved are used to treat serious infections, delay or interruption in therapy could be detrimental to patient care. In cases where efforts to contact the prescriber or a microbiologist has failed, in order to avoid delay to treatment a small supply should be made, until approval can be reasonably obtained.

2. Purpose and Outcomes

The purpose of this Policy is to highlight which antimicrobials are restricted within the Trust and the action that must be taken if a restricted antimicrobial is prescribed outside of a Trust approved clinical guideline.

3. Key Responsibilities

3.1 Prescribers responsibilities

- 3.1.1 The clinical indication for the restricted antimicrobial should be clearly documented on the prescription and in the case notes.
- 3.1.2 Before prescribing a restricted antimicrobial *outside of the guidelines*, the prescriber should discuss the case with a senior member of their team – registrar or above.
- 3.1.3 If the clinical team considers that there is no alternative therapy to the restricted antimicrobial, the doctor must contact a consultant microbiologist to discuss the patient and seek approval for its use (see Appendix 1 for contact information). The prescriber should ensure that all the relevant details are to hand when calling to avoid delays or the need for repeated calling. Alternatively, a referral can be made on Meditech or Extramed in hours, but again all relevant details must be submitted (see Appendix 2 [SBAR form]).

- 3.1.4 If attempts to contact the microbiologist in a timely way have failed, the prescriber should contact the ward or on-call pharmacist directly to request a short supply, to

avoid a delay to treatment. Urgent antibiotics can be acquired from the pharmacy emergency cupboard (RDH) or the pharmacy out of hours cupboard (QHB) when pharmacy is closed overnight. The acquired item must be signed out to the ward in question.

- 3.1.5 If continuation of therapy is required beyond the duration recommended by the consultant microbiologist, the doctor should obtain further approval from a microbiologist, and document this. Every attempt to obtain further approval should be made within working hours.

3.2 Consultant Microbiologist responsibilities

- 3.2.1 From 10am – 5.30pm daily a microbiologist will be available for telephone advice or will be able respond to enquires received from Meditech / ExtraMed referrals to discuss the patient, advise alternative unrestricted antimicrobial(s), or approve the use of a restricted antimicrobial. See Appendix 1 for contact information.
- 3.2.2 After 5.30pm, the on-call microbiologist should only be contacted for approval for certain antimicrobials (see Appendix 3). For other antimicrobials, the on-call pharmacist may supply enough treatment until the following day or enough doses to cover until the following morning can be obtained from the emergency cupboard overnight.
- 3.2.3 If a clinical decision cannot be made with the junior doctor, the microbiologist will request for a more senior member of the team to call to discuss.
- 3.2.4 The microbiologist should advise on an appropriate course length or when to review treatment. The prescriber should ensure that there is an appropriate stop or review date on the prescription.
- 3.2.5 The approving microbiologist will record details of all approvals, on the microbiologists electronic notepad (approval issued out of hours should be recorded the next working day)

3.3 Ward Pharmacists responsibilities

- 3.3.1 Ward pharmacists should ensure that all prescriptions for restricted antimicrobials are annotated by the prescriber with either approval from a consultant microbiologist e.g. in the additional information box, or an indication in accordance with Trust guidelines. If it is evident from the notes that it is being used for an approved indication, the pharmacist may annotate the chart accordingly. Where necessary the ward pharmacist should prompt the prescriber to contact microbiology to obtain approval.

- 3.3.2 Ward pharmacists should follow-up prescriptions for restricted antimicrobials that occurred outside of normal working hours, where a limited supply has been made without approval or stock obtained from the emergency cupboards, to ensure that approval is obtained.
- 3.3.3 Upon completion of a course of restricted antimicrobial, pharmacists should promptly remove surplus stock from ward areas, to ensure that unauthorised administration does not occur.
- 3.3.4 Restricted antimicrobials must not be added to ward stock lists without agreement with the antimicrobial pharmacist.

3.4 On-call Pharmacist responsibilities

- 3.4.1 The on-call pharmacist should treat requests for restricted agents as outlined in Appendix 3.
- 3.4.2 Where a supply of an antimicrobial not in accordance with guidelines is to be made out of hours without approval, the on-call pharmacist should ensure that the choice has been discussed with a senior member of the medical team (registrar or above) and not initiated by a junior doctor. If there are concerns about the clinical appropriateness of the choice, it should be discussed with the microbiologist on call by a senior member of staff.
- 3.4.3 Any concerns regarding a request for a restricted antimicrobial should be discussed directly with the medical team rather than via the ward nursing team, in order to avoid delays to treatment.
- 3.4.4 In situations where attempts to contact the prescriber or a microbiologist have failed, the pharmacist should make a small supply to avoid a delay to treatment.
- 3.4.6 The on-call pharmacist MUST record details of calls for restricted antimicrobials on the pharmacy on-call data base.
- 3.4.7 When pharmacy is closed on either site, enough stock to cover the overnight period will be obtained from the emergency cupboard at either site and the obtained stock should be signed out by the relevant nursing team.

3.5 Dispensary role

- 3.5.1 The quantity of medication required, indicated by the stop or review date, should be supplied only. Part-packing may be necessary in some cases.

3.5.2 Stock of restricted antibiotics obtained from the emergency cupboard overnight will be replenished by the pharmacy team. The team will also have access to the booking out log if ward pharmacists wished to view these.

4. Refusal to obtain approval - during working hours

If a prescriber is unwilling to contact microbiology to obtain approval, the pharmacist should supply one or two doses of medication and then contact the antimicrobial pharmacist team or as a last resort a microbiologist for assistance. The microbiologist will attempt to contact the prescriber to offer alternative therapy, or approval, as necessary. If the issue cannot be resolved, it will be referred to Clinical Director for the Business Unit or the Divisional Medical Director.

5. Monitoring Compliance and Effectiveness

Audit of prescribing patterns and compliance with the Policy (at all stages) will take place periodically.

Monitoring Requirement:	Adherence to the Policy <ul style="list-style-type: none"> - Approval obtained where necessary - Usage figures for restricted antibiotics
Monitoring Method:	Audit of prescribing of restricted antibiotics, using data from EPMA and microbiology records
Report Prepared by:	Antimicrobial Pharmacist
Monitoring Report presented to:	Antimicrobial Stewardship Group Infection Prevention and Control Group Drugs and Therapeutics Group
Frequency of Report	Annual

Appendix 1 - Microbiology contact information

The medical microbiology team will field enquiries:

Mondays - Fridays, 10 am - 5.30 pm

<p>From:</p> <ul style="list-style-type: none"> • UHDB Emergency Departments • UHDB consultants • UHDB specialty trainees (\geq ST3); if the specialty trainee has discussed with their consultant, before contacting microbiology • UHDB matrons/sisters • GPs 	<p>Via:</p> <ul style="list-style-type: none"> • 01332 788503 (or 01332 788218, option 1) or Meditech/ExtraMed referrals
<p>From:</p> <ul style="list-style-type: none"> • Other healthcare professionals (e.g. advanced clinical practitioners, junior doctors, pharmacists, physiotherapists) 	<p>Via:</p> <ul style="list-style-type: none"> • Meditech/ExtraMed referrals, if the healthcare professional has discussed with their consultant, before contacting microbiology

Mondays - Fridays, 5.30 pm - 10 am

Saturdays and Sundays

<p>From:</p> <ul style="list-style-type: none"> • UHDB Emergency Departments • UHDB consultants • UHDB specialty trainees (\geq ST3); if the specialty trainee has discussed with their consultant, before contacting microbiology • UHDB matrons/sisters • GPs <p>NB Midnight to 6 am, medical/surgical registrar/consultant to microbiology consultant only</p>	<p>Via:</p> <ul style="list-style-type: none"> • Switchboard
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Appendix 2 - SBAR form

Information that medical staff are required to provide to the microbiologist in order for them to make an informed decision about treatment. Ensure this information is available prior to calling.

<p>S Situation</p>	<p>Provide: Patient name and hospital/national health service number Include details on: Diagnosis/Differential diagnosis: <ul style="list-style-type: none"> a. Infectious disease b. History of the episode Include details on: Past medical history</p>
<p>B Background</p>	<p>Include background on the following: <ul style="list-style-type: none"> 1. Drug history: <ul style="list-style-type: none"> a. Past antibiotic(s) b. Current antibiotic(s) c. Antibiotic allergy/allergies 2. Social history (e.g. occupation, travel) 3. Examination findings 4. Pathology (e.g. radiology) findings 5. Any information on surgery done, date and type 6. New or past significant Microbiology results from EPMA 7. Details on any antibiotic allergies </p>
<p>A Assessment</p>	<p>Include relevant details of: <ul style="list-style-type: none"> 1. Trend of inflammatory markers 2. Prior discussion with Registrars and Consultant 3. Infection control alert organism like MRSA, GDH/CDT, ESBL/ampC/VRE/MDR/CRO/CRE 4. Clinical details regarding patient e.g. does area look inflamed etc. </p>
<p>R Recommendation</p>	<p>Ask relevant questions to the medical microbiologist</p>

Appendix 3 - Guide to prescribing of restricted antimicrobials.

If a restricted antibiotic is prescribed **outside of an approved Trust guideline**, approval must be obtained from a consultant microbiologist. If the restricted antimicrobial is being used in accordance with an approved Trust guideline or a blood or urine sensitivity result, approval is not required.

The restricted antibiotics have been categorised as S or M depending on whether it is necessary to call a microbiologist overnight to obtain approval.

M = Microbiologist should to be contacted to obtain approval, even out of hours

S = Pharmacist can supply enough out of hours or stock can be acquired from emergency cupboards until the following day when approval should be obtained. If there is any doubt about the clinical effectiveness of the choice, the prescriber should be asked to discuss with a microbiologist.

In cases where efforts to contact a microbiologist has failed, in order to avoid delay to treatment a small supply will be made, until approval can be reasonably obtained.

Restricted antimicrobial	If being used outside of a guideline/culture result
Ambisome	M
Amikacin	M
Anidulafungin	M
Aztreonam	M
Caspofungin	M
Cefiderocol	M
Ceftazidime/Avibactam	M
Ceftobiprole	M
Ceftolozane/Tazobactam	M
Chloramphenicol IV	M
Ciprofloxacin	S
Colistin IV	M
Daptomycin	M
Dalbavancin	M
Ertapenem	M
Famciclovir	M
Fidaxomicin	S (Gastroenterologist approval also acceptable)

Fosfomycin (IV)	M
Foscarnet	M
Ganciclovir	M
Imipenem	M
Isavuconazole	M
Levofloxacin	S
Linezolid	S
Meropenem	S
Micafungin	M
Moxifloxacin	M unless for TB
Posaconazole	M
Remdesivir	Virology approval required
Tigecycline	M
Temocillin	S
Valaciclovir	M
Valganciclovir	M
Voriconazole	M